



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/776,699 | 02/05/2001 | Frank W. Bennett | STL9476 | 5363 |

7590 03/31/2004

Jennifer M. Buenzow
Seagate Technology LLC
Intellectual Property Department - SHK2LG
1280 Disc Drive
Shakopee, MN 55379-1863

EXAMINER

DATSKOVSKIY, MICHAEL V

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2835

DATE MAILED: 03/31/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/776,699

Applicant(s)

BERNETT ET AL.

Examiner

Michael V Datskovskiy

Art Unit

2835

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 February 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's arguments filed 02/17/2004 have been fully considered but they are not persuasive. First: Disregarding to the names of the parts, Gatti et al teach a hard disk drive 1 mounted on a part 20 named "cradle" , but which performs exactly the same role as a part named "mounting plate" in the proposed invention. Second: It is inherent that in the device including rotating parts causing a vibration increasing of the mass of non-rotating parts of the device would decrease said vibration (See, for example Forbord et al US Patent 6,583,965, Summary of the Invention; or Toupin, US Patent 5,212,680, col.3, lines 59-68) . In the instant application applicant suggests to double the weight of the damped structure. From examiners point of view the main damping factor in a whole structure are resilient support members 118. Applicants results where achieved with particular type (weight and speed) of a disk drive and specific dumping supporting members 118. Mounting of disk drives on some kind of intermediate plate or frame which are further mounted in a chassis through resilient support members (dampers) is well known in the art. It is inherent that an addition weight added to the weight of non-rotating parts of a disk drive would decrease its vibration. Applicant has not provided any evidence of the criticality of the claimed weight ranges. A particular parameter must first be recognized as a result - effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. In re Antonie , 559 F.2d 618, 195 USPQ 6 (CCPA 1977). Applicants did not rebut a prima facie case of obviousness by showing unexpected results or the

Art Unit: 2835

criticality of the claimed range. In such a situation, the applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range." In re Woodruff , 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). See MPEP § 716.02 - § 716.02(g) for a discussion of criticality and unexpected results. Therefore, examiner insists that discovering the ratio between an additional weight and the weight of disk drive is a matter of the discovery of optimum of working ranges involving only routine skill in the art.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gatti et al.

Gatti et al teach a device, Figs.1-4, for increasing inertia of a disk drive mounted within a computer system, the disk having a first inertia, the device comprising: a mounting plate 20 secured to the disk drive 1, the mounting plate having a second inertia; and a plurality of resilient compressible members 50 secured between the mounting plate 20 and the computer system 10 for isolating movement of the mounting plate 20 relative to the computer system 10. Gatti et al teaches furthermore: said mounting plate 20 includes a base , a first side wall connected to the base, and a second side wall

Art Unit: 2835

connected to the base opposite the first side wall, said walls secured to the computer system through resilient members 50, wherein the first side wall and the second side wall each have at least one mounting aperture 52, 54 and the computer system 10 has at least one aperture 42, 44, each mounting aperture aligned with each system aperture, and comprising a fastening mechanism received within each mounting aperture and secured within each corresponding system aperture; said resilient compressible member made of any suitable material (col.2, lines 61-63) and have a first end having a grommet-like portion and a second end having a grommet-like portion, said grommet-like portions being inserted in the respective apertures of the mounting plate 20 and the computer system 10.

Gatti et al does not discuss an inertias of the mounting plate and the disk drive, or a certain range of relations between them, However, each of these parts inherently poses some inertia, and by adding the mounting plate to the disk drive their common inertia will be inherently increased. It would have been obvious to one having ordinary skill in the art at the time the invention was made to double the inertia of the disk drive by connecting it with the mounting frame having the inertia equal to the inertia of said disk drive, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Regarding to the claims 7-10 and 18-20: The method steps are obviously necessitated by the device structure as it is disclosed by Gatti et al , considering that discovering the optimum or workable ranges involves only routine skill in the art.

Conclusion

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael V Datskovskiy whose telephone number is (571) 272-2040. The examiner can normally be reached on 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on ((571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2835

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael V Datskovskiy
03/29/04

Michael V Datskovskiy
Primary Examiner
Art Unit 2835